

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 5mm X 9mm Exp. Pad

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**TOTAL MASS (g) : 0.117709**

COMPONENT MATERIAL	VENDOR/ INDUSTRY NAMES	CONSTITUENT NAME	CAS NUMBER	CONSTITUENT MASS (g)	CONSTITUENT (PPM) OF MATERIAL	CONSTITUENT (PPM) OF TOTAL PKG.		
Active Device	Linear Technology	Silicon (Si)	7440-21-3	0.003505	1000000	29776.8789062		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.049823	975000	423273.46875		
		Iron (Fe)	7439-89-6	0.001226	24000	10415.5361328		
		Phosphorus (P)	7723-14-0	0.000015	300	127.433143616		
		Zinc (Zn)	7440-66-6	0.000036	700	305.839569092		
		Nickel (Ni)	7440-02-0	0.000000	0	0		
		Silicon (Si)	7440-21-3	0.000000	0	0		
		Magnesium (Mg)	7439-95-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
<b>Lead Frame Total:</b>				<b>0.051100</b>	<b>1000000</b>	<b>434122.28125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002793	1000000	23726.0546875		
		<b>External Plating Total:</b>				<b>0.002793</b>	<b>1000000</b>	<b>23726.0546875</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000138	1000000	1172.38500977		
<b>Internal Plating Total:</b>				<b>0.000138</b>	<b>1000000</b>	<b>1172.38500977</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001380	750000	11723.8496094		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		Lead (Pb)	7439-92-1	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.000000	0	0		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000000	0	0		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000460	250000	3907.95019531		
<b>Die Attach Total:</b>				<b>0.001840</b>	<b>1000000</b>	<b>15631.8007812</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.007554	130000	64175.3359375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.049975	860000	424564.78125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000581	10000	4935.91113281		
		<b>Encapsulation Total:</b>				<b>0.058110</b>	<b>1000000</b>	<b>493676.03125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000223	1000000	1894.50610352		
					<b>TOTAL MASS (g) :</b>	<b>0.117709</b>		